Advisory Action Before the Filing of an Appeal Brief

| Application No. | Applicant(s) | |
|-----------------|----------------|--|
| 10/524,817 | MATSUDA ET AL. | |
| Examiner | Art Unit | |
| DANA SHIN | 1635 | |

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| The MAILING DATE of this communication appe | ars on the cover sheet with the o | correspondence add | ress | |
| THE REPLY FILED 28 February 2008 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. | | | | |
| 1. The reply was filed after a final rejection, but prior to or on application, applicant must timely file one of the following application in condition for allowance; (2) a Notice of Apperior Continued Examination (RCE) in compliance with 37 C periods: | the same day as filing a Notice of a replies: (1) an amendment, affidavi ral (with appeal fee) in compliance | Appeal. To avoid abar t, or other evidence, w with 37 CFR 41.31; or | hich places the (3) a Request | |
| a) The period for reply expires <u>3</u> months from the mailing date | of the final rejection. | | | |
| b) The period for reply expires on: (1) the mailing date of this An no event, however, will the statutory period for reply expire to Examiner Note: If box 1 is checked, check either box (a) or (IMONTHS OF THE FINAL REJECTION. See MPEP 706.07(f | iter than SIX MONTHS from the mailing b). ONLY CHECK BOX (b) WHEN THE). | g date of the final rejection FIRST REPLY WAS FII | n. LED WITHIN TWO | |
| Extensions of time may be obtained under 37 CFR 1.136(a). The date of have been filed is the date for purposes of determining the period of extunder 37 CFR 1.17(a) is calculated from: (1) the expiration date of the set forth in (b) above, if checked. Any reply received by the Office later may reduce any earned patent term adjustment. See 37 CFR 1.704(b). NOTICE OF APPEAL | ension and the corresponding amount hortened statutory period for reply origi | of the fee. The appropria nally set in the final Offic | ate extension fee e action; or (2) as | |
| The Notice of Appeal was filed on A brief in completing the Notice of Appeal (37 CFR 41.37(a)), or any exter Notice of Appeal has been filed, any reply must be filed with the notice of Appeal has been filed. | sion thereof (37 CFR 41.37(e)), to | avoid dismissal of the | | |
| AMENDMENTS | | | | |
| 3. The proposed amendment(s) filed after a final rejection, be (a) They raise new issues that would require further cor (b) They raise the issue of new matter (see NOTE below (c) They are not deemed to place the application in beto | isideration and/or search (see NO¯ v); | ΓE below); | | |
| appeal; and/or | | | | |
| (d) ☐ They present additional claims without canceling a c NOTE: (See 37 CFR 1.116 and 41.33(a)). | orresponding number of finally reje | ected claims. | | |
| 4. The amendments are not in compliance with 37 CFR 1.12 5. Applicant's reply has overcome the following rejection(s): | | mpliant Amendment (l | PTOL-324). | |
| Newly proposed or amended claim(s) would be all non-allowable claim(s). | owable if submitted in a separate, | timely filed amendmer | nt canceling the | |
| 7. For purposes of appeal, the proposed amendment(s): a) will not be entered, or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended. The status of the claim(s) is (or will be) as follows: Claim(s) allowed: | | | | |
| Claim(s) objected to: Claim(s) rejected: <u>1-6</u> . | | | | |
| Claim(s) withdrawn from consideration: AFFIDAVIT OR OTHER EVIDENCE | | | | |
| The affidavit or other evidence filed after a final action, but because applicant failed to provide a showing of good and was not earlier presented. See 37 CFR 1.116(e). | | | | |
| 9. The affidavit or other evidence filed after the date of filing a entered because the affidavit or other evidence failed to or showing a good and sufficient reasons why it is necessary | vercome <u>all</u> rejections under appea and was not earlier presented. Se | al and/or appellant fail ee 37 CFR 41.33(d)(1 | s to provide a). | |
| 10. | n of the status of the claims after e | ntry is below or attach | ed. | |
| The request for reconsideration has been considered but See Continuation Sheet. | does NOT place the application in | condition for allowan | ce because: | |
| 12. ☐ Note the attached Information <i>Disclosure Statement</i> (s). (PTO/SB/08) Paper No(s) 13. ☑ Other: <u>See Continuation Sheet</u> . | | | | |
| | /J. E. Angell/ Primary Examiner, Art U | nit 1635 | | |
| | | | | |

Continuation of 11. does NOT place the application in condition for allowance because: Brown et al. taught that "the phosphodiester linkages of natural RNA are modified to include at least one of a nitrogen or sulfur hetero-atom". See paragraph 0050. Applicant argues that the "4-thio UTP" taught by Brown et al. is a modification incorporated into the "base" not "sugar". Irrespective of the actual location of the "4-thio UTP" modification, Brown et al. clearly taught, suggested, and indeed recommended that the "sugar" of siRNA molecules comprises at least one of sulfur hetero-atom. Furthermore, 4-thio "sugar" compound or moeity was known in the art as early as the year of 1994, as evident by the teachings of Walker et al. (US 5,356,882). See columns 8-10 of the citation. Applicant further argues that the reactions within Burgess et al. do not involve thio-nucleosides and Burgess et al. taught away from the claimed invention because they suggested, "no method for preparing nucleoside triphosphates is suitable for all nucleobase derivatives". It is true that Burgess et al. taught that there is no perfect, single method that can be applied to all nucleobase derivatives and that the efforts to syntehsize nucleoside triphosphates have languished during 1990-2000. However, at the same time, Burgess et al. taught that the arena of synthesizing and preparing nucleoside triphosphates "is likely to expand" because of the increasing art-wide demand and need for nucleoside triphosphates, which is triggered by the therapeutic applications of nucleoside triphosphates, and they also encouraged and predicted "a revival of interest in preparations of these important molecules". See page 2058. While acknowledging the fact that there is no single method of preparing nucleoside triphosphates, Burgess et al. taught Yoshikawa's POCI3 phosphorylation procedure to produce nucleoside monophosphates, and they also suggested direct, one-step triphosphorylation procedures, which could be further developed and modified to facilitate syntehsis of nucleoside triphosphates. Hence, this rejection is maintained.

Continuation of 13. Other: No proposed amendments have been filed. PTO-FORM 892 is attached..